We claim:

1. A composition for treating a CAG repeat disorder comprising a compound which modulates PDE10A expression and a pharmaceutically acceptable carrier.

2. A composition as claimed in claim 1, wherein said compound is selected from the group consisting of: quinpirole, alloxan, miconazole nitrate, MDL-12330A, and tetracyline derivatives such as demeclocycline.

3. A composition as claimed in claim 1, wherein said disorder is Huntington's disease.

4. A composition as claimed in claim 1, wherein said compound is selected from the group consisting of:

(6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(5-benzofuranyl)-2-methyl-pyrazino[2',1':6,1]pyrido[3,4-b]indole-1,4-dione,

(6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(5-benzofuranyl)-pyrazino[2',1':6,1]py rido[3,4-]indole-1,4-dione,

(6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(5-benzofuranyl)-2-isopropyl-pyrazino[2',1':6,1]pyrido[3,4-b]indole-1,4-dione,

(3S,6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(5-benzofuranyl)-3-methyl-pyrazino[2',1':6,1]pyrido[3,4-b]indole-1,4-dione,

(3S,6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(5-benzofuranyl)-2,3-dimethyl-pyrazino[2',1':6,1]pyrido[3,4-b]indole-1,4-dione.

5. A composition as claimed in claim 1, wherein said compound is selected from the group consisting of: KS-505, IC224,SCH 51866, IBMX and Dipyridamole.

6. The use of a composition as claimed in claim 1 for treating a CAG repeat disorder comprising administering said composition to a subject in need of such treatment.

7. The use of a composition of claim 1 for treating Huntington's disease comprising administering said composition to a subject in need of such treatment.

8. A method for identifying a compound which inhibits or promotes a CAG repeat disorder, comprising the steps of:

(a) selecting a control animal having PDE10A and a test animal having PDE10A;

(b) treating said test animal using a compound; and,

(c) determining the relative quantity of RNA corresponding to PDE10A, as between said animals.

9. A method of claim 8, wherein said animal is a mammal.

10. A method of claim 9, wherein said mammal is a mouse.

11. A method of claim 10, wherein said mouse is R6/2 transgenic mouse.

12. A method of claim 8, wherein said CAG repeat disorder is Huntington's disease.

13. A method for identifying a compound which inhibits or promotes a CAG repeat disorder, comprising the steps of:

(a) selecting a host cell containing PDE10A;

(b) cloning said host cell and separating said clones into a test group and a control group;

(c) treating said test group using a compound; and

(c) determining the relative quantity of RNA corresponding to PDE10A, as between said test group and said control group.

14. A method of claim 13, wherein said CAG repeat disorder is Huntington's disease.

15. A method for detecting the presence of or the predisposition for a CAG repeat disorder, said method comprising determining the level of expression of RNA corresponding to PDE10A in an individual relative to a predetermined control level of expression, wherein a decreased expression of said RNA as compared to said control is indicative of a CAG repeat disorder.

16. A method of claim 15, wherein said CAG repeat disorder is Huntington's disease.

17. A method of claim 15, wherein said expression is measured by in situ hybridization.

18. A method of claim 15, wherein said expression is measured using a polymerase chain reaction.

19. A method of claim 15, wherein said expression is measured using a DNA fingerprinting

technique.

20. (New) A method as claimed in claim 15, wherein said expression is measured by determining the level of PDE10A polypeptide in said individual relative to a predetermined control level of PDE10A polypeptide.